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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,027	05/23/2001	Richard W. McCoy	242-140	9989

1009 7590 07/16/2003

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247 NORTH BROADWAY  
LEXINGTON, KY 40507

EXAMINER
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ROYAL, PAUL

ART UNIT	PAPER NUMBER
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3611

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/864,027

Applicant(s)

MCCOY ET AL.

Examiner

Paul Royal

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5 May 2003 has been entered.

2. Note the amendment filed with the request for continued examination above cancels claim 10 and states new claim 22 is a re-presentation of formerly dependent claim 10 however the limitations of claim 22 are inconsistent with the limitations of formerly dependent claim 10. Applicant should properly explain the status of claim 22 (new, original, previously amended, etc).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 7-9 and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Steiler (US 6,080,014).

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Steiler teaches a trailer hitch receiver assembly for towing a trailer behind a towing vehicle, comprising:

a frame member (3) including a hitch receiver box (4);

at least one mounting bracket (2) carried on the frame member for securing the frame member to the vehicle;

utility power outlets (16, 16A, 16B, 16C) carried on the first and second sides of frame member (3); and

hinged covers (HCOVER, see Examiner annotated Figure 9).

Note, where Steiler teaches power outlets which are electrical connectors, it is understood to be inherent that the power outlet of Steiler is able to pass AC or DC power, including standard VAC or DC power and standard 12 VDC through each of the power outlets because the electrical conductivity of the pins within the connectors is not limited to a specific type of applied power and Steiler teaches, in table 1, an example of a range of pins which can be carried within its variety of connectors, thereby presenting a range of connector/pin combinations capable of carrying either AC or DC power.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claims 1-2, 4-5, 15-17 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belinky et al. (US 5,904,261) in view of Hughes (US 5,766,020).

Belinky et al. teaches a trailer hitch receiver assembly for towing a trailer behind a towing vehicle, comprising:

a frame member (20) including a hitch receiver box;

at least one mounting bracket (MB1, see Examiner's annotated Figure 1) carried on the frame member for securing the frame member to the vehicle; and

a utility power outlet (40) carried on the frame member (20).

Belinky et al. does not teach a trailer hitch receiver assembly including a trailer light plug.

Hughes teaches a trailer light plug (10) mateable with a plurality of trailer wiring harness connector receptacles and providing visual diagnostic indication observance by the user.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the trailer hitch receiver assembly of Belinky et al., to include a trailer light plug, as taught by Hughes, providing visual diagnostic indication observance by the user.

Note, where Belinky et al. teaches a power outlet which is an electrical connector, it is understood to be a design choice to supply AC power, including 110 VAC or DC power, including 12 VDC through a "standard" power outlet.

Note using the power of the outlet(s) for powering equipment other than a trailer is understood to merely be intended use and is given little patentable weight.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Belinky et al. and Hughes, as applied to claim 2, in further view of Witkowski et al. (US 6,171,118).

Belinky et al. and Hughes, as applied to claim 2, includes all the limitations of claim 3 except wherein the power outlet includes a hinged cover.

Witkowski et al. teaches a power outlet (12) for mounting to an automobile body having a hinged cover (35) to protect the outlet from the environment.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the trailer hitch receiver assembly of Belinky et al. and Hughes, as applied to claim 2, to include the power outlet having a hinged cover, as taught by Witkowski et al., to protect the outlet from the environment.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Belinky et al. and Hughes, as applied to claim 2, in view of Witkowski et al. (US 6,171,118).

Belinky et al. and Hughes, as applied to claim 2, includes all the limitations of claim 6 except wherein the power outlet includes a hinged cover.

Witkowski et al. teaches a power outlet (12) for mounting to an automobile body having a hinged cover (35) to protect the outlet from the environment.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the trailer hitch receiver assembly of Belinky et al. and Hughes, as applied to claim 2, to include the power outlet having a hinged cover, as taught by Witkowski et al., to protect the outlet from the environment.

5. Claims 11, 13 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belinky et al. in view of Hughes (US 5,766,020).

Belinky et al. teaches a method of powering an electrical device from a trailer hitch receiver assembly, comprising:

providing a trailer hitch receiver assembly (22) with a utility power outlet (40), and powering the utility power outlet from the towing vehicle to which the trailer hitch assembly is connected.

Belinky et al. does not teach providing a trailer hitch receiver assembly including a trailer light plug.

Hughes teaches a trailer light plug (10) mateable with a plurality of trailer wiring harness connector receptacles and providing visual diagnostic indication observance by the user and powering the utility outlet with 110 volts AC power from a power inverter on the towing vehicle, see column 4, lines 42-47, to supply an appliance with AC voltage.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of powering an electrical device from a trailer hitch receiver assembly of Belinky et al., to include a trailer light plug, as taught by Hughes, providing visual diagnostic indication observance by the user and to include powering the utility outlet with 110 volts AC power from a power inverter on the towing vehicle, as taught by Hughes, to supply an appliance with AC voltage.

Note, where Belinky et al. teaches a power outlet which is an electrical connector, it is understood to be a design choice to supply AC power, including 110 VAC or DC power, including 12 VDC through a "standard" power outlet.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Belinky et al., and Hughes, as applied to claim 11, in view of Anderson, Jr. (US 4,936,796).

Belinky et al., and Hughes, as applied to claim 11, teach all the limitations of claim 12 except powering the utility outlet with 12 volts DC power from a battery on the towing vehicle.

Anderson, Jr. teaches powering the utility outlet (12) with 12 volts DC power from a battery (B) on the towing vehicle to provide a DC power source.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the trailer hitch receiver assembly of Belinky et al., and Hughes, as applied to claim 11, to include powering the utility outlet with 12 volts DC power from a battery on the towing vehicle, as taught by Anderson, Jr., to provide a DC power source.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Steiler, as applied to claim 7, in view of Hughes (US 5,766,020).

Steiler, as applied to claim 7 teaches all the limitations except a trailer hitch receiver assembly including a trailer light plug.



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Hughes teaches a trailer light plug (10) mateable with a plurality of trailer wiring harness connector receptacles and providing visual diagnostic indication observance by the user.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the trailer hitch receiver assembly of Steiler, to include a trailer light plug, as taught by Hughes, providing visual diagnostic indication observance by the user.

Note, where Steiler teaches a power outlet which is an electrical connector, it is understood to be a design choice to supply AC power or DC power through the power outlet because it is inherent that the electricity will be AC or DC.

It would have been obvious to one of ordinary skill in the art at the time of the invention to select either AC power or DC power for the electricity applied to the plugs.

### ***Response to Arguments***

3. Applicant's arguments filed 5 May 2003 have been fully considered but they are not persuasive. See below explanations.

In response to applicant's argument that the instant invention intends to use the power outlet to power utilities whereas the prior art of Belinky et al. '261 in combination with Hughes cited by the Examiner as prior art against claims 1, 2, 4, and 5 uses the power outlet for brakes and turn signals, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the

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prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

The Examiner reasserts that it would be obvious to one of ordinary skill in the art to connect equipment requiring AC or DC power to the power outlet. Further, Belinky et al.'s usage of a "standard" connector, rather than a specialized connector, evidences that the connector is suitable for attachment of other devices using the "standard" connector, rather than only brake and turn signal equipment using a specialized connector because standardized connectors are understood to allow connection of a broad range of devices whereas the use of a specialized connector might indicate a more limited range of equipment connections.

Applicant's argument with regard to the secondary reference Hughes is non-persuasive because Hughes clearly states it is for coupling an electrical system of a first vehicle with a second vehicle or appliance, see column 1, lines 4-11, and the power adapter is presented as being applicable to interface with various styles of trailer wiring harnesses, which is understood to include the harness of the instant invention. Other than hortatory statements, applicant has not presented any coherent rationale why the power adapter interface apparatus of Hughes which is designed to interface with various styles of trailer wiring harnesses is not compatible with a trailer hitch already having a utility power outlet.

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Applicant's argument with regard to the reference Witkowski et al. is non-persuasive because Witkowski et al. clearly states it is for providing an outlet cover for electrical plugs attached to a vehicle, see column 2, lines 23-34, to protect the outlet (more specifically the contacts in the outlet plug) from the environment and the use of the outlet cover is not limited to a specific combination of light plug and/or power outlet.

Applicant's arguments against the prior art Steiler are not persuasive because one of ordinary skill in the art would understand that the number of pins within the connector does not specifically determine whether the connector will pass AC or DC. For example, two pin connectors can pass both AC and DC. One of ordinary skill would understand that running AC current through a four, six, or seven pin connector merely means there may be pins which do not pass any current or various pins can pass various current. Further, there is no requirement that each and every pin in a connector always have current passing through the pin.

Still further, if the power passing through the pin is AC, one of ordinary skill would not connect it to a system requiring DC power and vice versa.

Additionally, applicant's invention does not include a power source, such as AC or DC and merely presents a power outlet, in combination with other trailer hitch receiver assembly components. Applicant appears to be arguing that connectors are only capable of passing specific types of power (AC or DC) and those arguments are contrary to basic electrical principles. To be clear, it is the Examiner's position that the power (AC or DC) which passes through a connector is not dependent upon the number of pins in the connector and it is well established that the same connector type (unless

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otherwise modified, for example by the addition of a diode or capacitor), which passes DC, could be used to pass AC (and vice versa).

Additionally, the multiple connectors taught in Steiler can be used to pass DC in all connectors, AC in all connectors, or any combination of AC and DC.

With regard to applicant's argument that Steiler is not applicable to the instant invention of claim 12 because the instant invention of claim 12 is directed to a specific species of power receptacle ("standard 12 volt DC") applicant is invited to point out where Steiler indicates it is limited to use with either DC power or AC power.

Applicant's arguments with regards to claims 11 and 13 are non-persuasive because applicant appears to be illogically arguing the electrical connector 40 of Belinky et al. is not a "utility power outlet" however that position is not tenable because one of ordinary skill in the art would understand the electrical connector 40 of Belinky et al. is clearly a "power outlet" which can be used for "utility" purposes and hence is a "utility power outlet".

Applicant's arguments, with respect to claim 13, discussing applying AC power to the trailer light plug is unclear where the claim recites powering the utility outlet with 110 VAC and the prior art Hughes clearly states the use of an inverter to convert DC power from the towing vehicle into 110 VAC to the power [utility] output.

Applicant's argument against the Examiner's application of the prior art Anderson, Jr, to claim 12 is not persuasive because Anderson teaches it's purpose is, in part, to provide an electrical adapter which allows various electrical items to be operated remotely through connection with the battery which is understood to include positioning

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the DC power outlet wherever is appropriate for the remote operation of the electrical item, such as locating the DC power outlet on a trailer hitch receiver whether or not the trailer hitch receiver includes a trailer light plug. Further, applicant has not presented any explanation why the utility outlet (12) cannot be combined with the trailer light plug and attached to the hitch receiver assembly. To the contrary, Anderson, Jr. teaches the utility outlet (12) can be mounted in a switch box which one of ordinary skill in the art would recognize as mountable to the trailer hitch receiver assembly of the instant invention.

Applicant repeatedly argues there is a difference between a connector which can pass AC and a connector which can pass DC although no additional elements, such as a capacitor or diode are recited - where these additional elements are commonly used to allow only AC or DC to pass through a connection. In order for the Examiner to review the merits of applicants arguments over the difference between a connector which can pass AC and a connector which can pass DC, applicant is requested to provide information which explains how and why a connector which can be used to pass DC cannot be used to pass AC.

Note while applicant repeatedly recites that the applied prior art is not applicable because of the type of power (AC vs DC) being applied to the applicable connector, applicant has generally not claimed any element for providing a unique type of power except in claims 12, and 13.

Where the connector is not usually understood to be restricted in the type of power (AC or DC) it can pass, and applicant does not include a specific type of power

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source (AC or DC), applicant's claim limitations reciting an AC or DC power outlet are given little patentable weight with regards to the specific type of power (AC or DC) the connector/outlet is understood to pass.


### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Royal whose telephone number is 703-308-8570. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on 703-308-0629. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

  
P. Royal  
July 1, 2003

Paul Royal  
Examiner  
Art Unit 3611  
  
**LESLEY D. MORRIS**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3600**

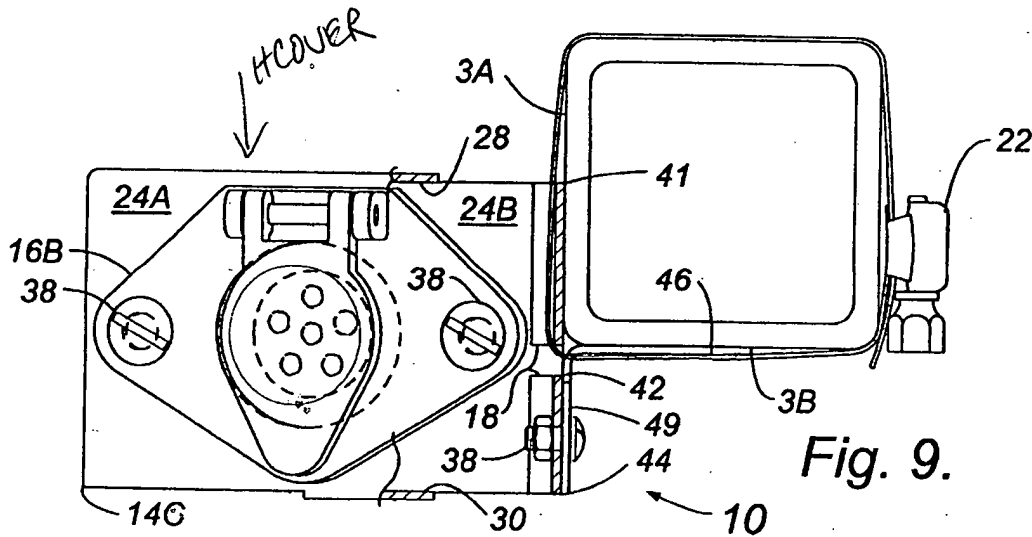
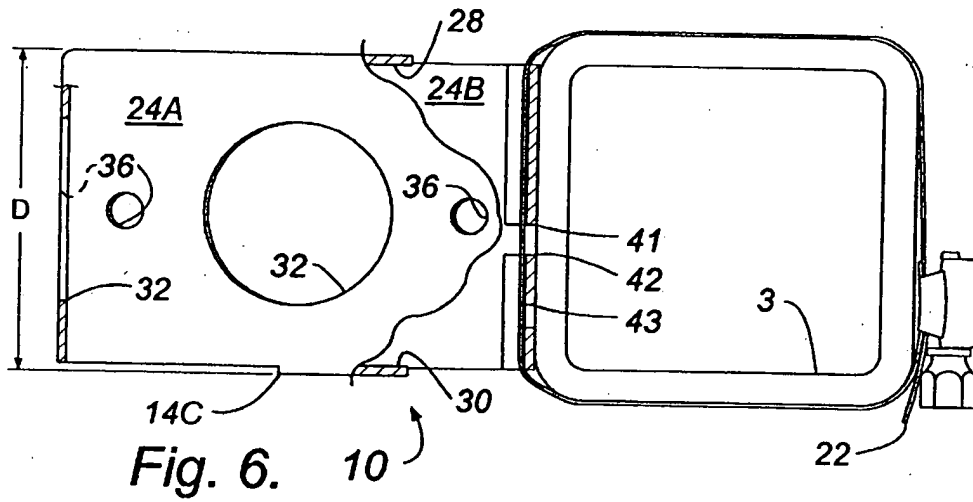
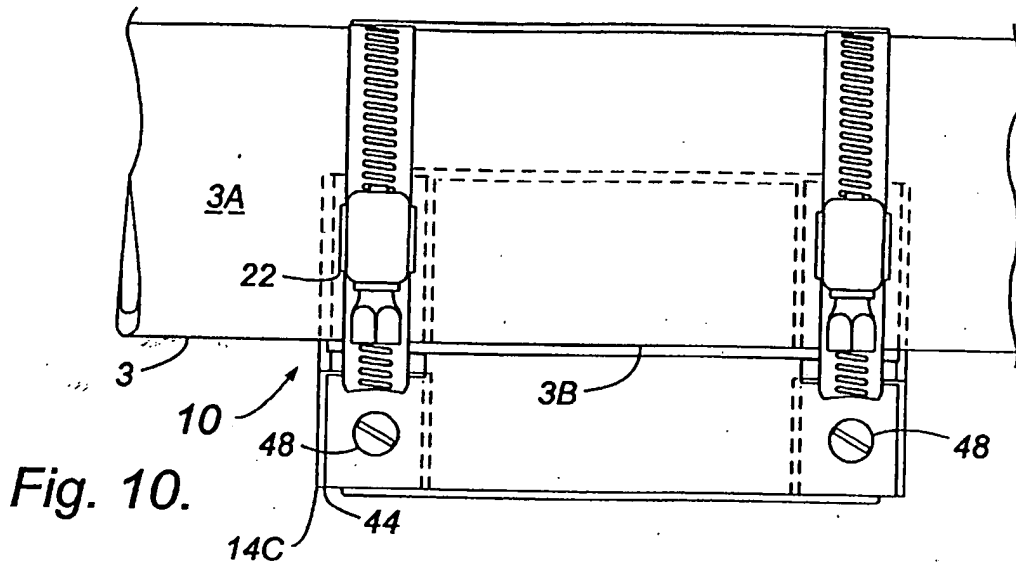


FIG-1

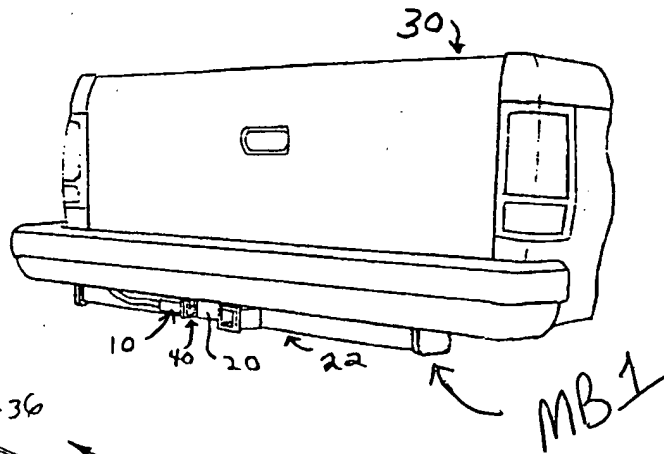


FIG-2

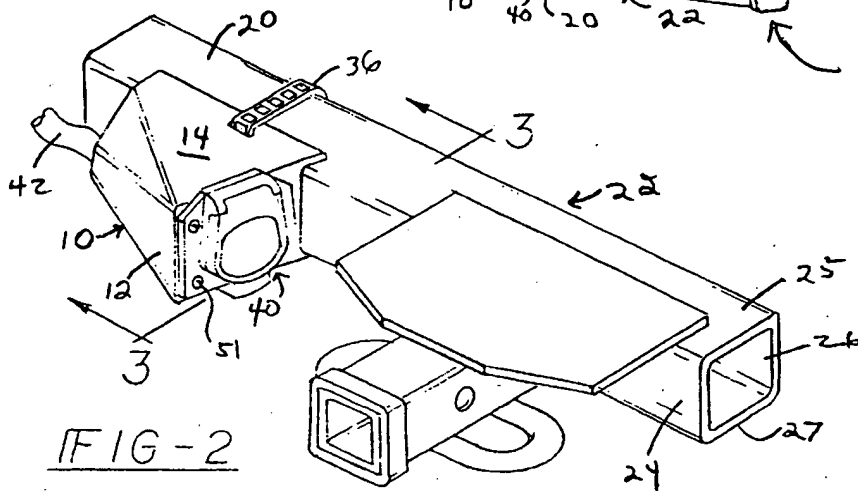


FIG-3

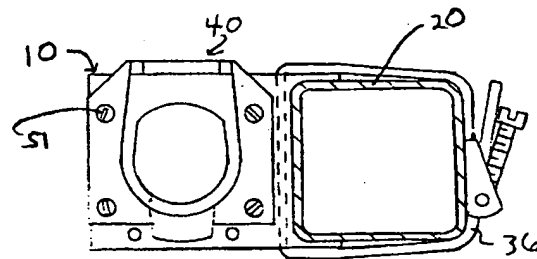


FIG-4

